Welcome to UF Faculty Research Expertise

Helping faculty find research partners and new ways to collaborate.

Academic Analytics, Discovery Suite

May 2018
Goals

• Promote faculty expertise to external stakeholders

• Encourage research collaboration, new discoveries

• Expand the research enterprise, find grant opportunities

• Add content from UF (grants and patents)

• Edit content (update Faculty profile, add publications)

• Search by faculty names or research topics
Agenda

- Preliminary models at other universities
- University of Florida model – external and internal views
- Sources of information
- Next steps
MIT Faculty Research Collaboration Tool
Duke Collaboration Tool

About This Tool: The Duke University Collaboration Tool is an online portal intended to showcase and foster research collaboration. The tool's underlying data comprise the entire set of Duke research faculty, their grants, initiatives, and collaborations. Users may input a specific search term, or browse by university-wide research initiatives.
Faculty at the University of Florida are helping to solve issues that challenge our state, the nation, and global communities.

The external view helps the university promote the range of faculty expertise to prospective faculty and students, industry leaders and funding agencies.
Faculty Profile

1. Affiliations with academic departments and doctoral programs
2. Recent publications, grants, and honors
3. Research summary, research interests, and key terms
4. Shows similar scholars and network of faculty collaborations

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
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</thead>
<tbody>
<tr>
<td>SMITH, SUZANNA D</td>
<td>Family Youth and Community Sciences, Department of</td>
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<tr>
<td>SMITH, CRAIG</td>
<td>Art and Art History, School of</td>
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<tr>
<td>SMITH, BRENDA JO</td>
<td>Music, School of</td>
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<td>SMITH, BENJAMIN B</td>
<td>Political Science, Department of</td>
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<td>SMITH, WESLEY CLAY</td>
<td>Neuroscience, Department of</td>
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<tr>
<td>SMITH, BARBARA K</td>
<td>Physical Therapy, Department of</td>
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<tr>
<td>SMITH, HUGH A</td>
<td>Entomology and Nematology, Department of</td>
</tr>
<tr>
<td>SMITH, STEVEN M</td>
<td>Community Health and Family Medicine, Department of</td>
</tr>
<tr>
<td>SMITH, STEPHANIE ANN</td>
<td>English, Department of</td>
</tr>
<tr>
<td>SMITH, SONDRA LORI</td>
<td>Human Development and Organizational Studies in Education - Counselor Education</td>
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<tr>
<td>SMITH, KATHRYN JEAN</td>
<td>Pharmacotherapy and Translational Research, Department of</td>
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</table>
Faculty Name search

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**PLANT BIOLOGIST DOUG SOLTIS ELECTED TO NATIONAL ACADEMY OF SCIENCES**

MAY 3, 2017
RESEARCH SUMMARY

I am a Distinguished Professor in the Florida Museum of Natural History and Department of Biology at the University of Florida. My research interests in plant biology are diverse—we study plant evolution using modern DNA approaches including next generation sequencing methods and the use of "big data" sets that require challenging computational analyses; specific interests include plant phylogeny, genome doubling (polyploidy), floral evolution, angiosperm diversification, and phylogeography.

RESEARCH INTERESTS

polyploidy

KEY TERMS

| Species | angiosperm | clade |
| datum   | gene       | population |
| result  | project    | lineage |

SIMILAR SCHOLARS

RICHARD HENNIG  
ISER DELEON  
CAROLE BEAL

JOSE PRINCIPE  
ADRIAN ROITBERG  
GRAHAM LAMB

ERIC TRIPLETT  
MARK TEHRANIPOUR  
DOUGLAS SPEAROT
Recent Publications

listed by year and title

2017

- Deep reticulation and incomplete lineage sorting obscure the diploid phylogeny of rain-lilies and allies (Amaryllidaceae tribe Hippeastrae)
- Taxonomic revision of the Opuntia humifusa complex (Opuntieae: Cactaceae) of the eastern United States
- Whole-genome duplication and molecular evolution in Cornus L. (Cornaceae) – Insights from transcriptome sequences
- Detecting Alternatively Spliced Transcript Isoforms from Single-Molecule Long-Read Sequences without a Reference Genome
- Pure polyploidy: Closing the gaps in autoployploid research: Pure polyploidy
- Insights into the evolution of hydroxyproline rich glycoproteins from 1000 plant transcriptomes
- Evolutionary Conservation of ABA Signaling for Stomatal Closure in Ferns
- Evolution of floral diversity: genomics, genes and gamma
- Evolutionary and domestication history of Cucurbita (pumpkin and squash) species inferred from 44 nuclear loci
- Karyotypic variation and pollen stainability in resynthesized allopolyploids Tragopogon miscellus and T. mirus
- Insights into the historical assembly of East Asian subtropical evergreen broadleaved forests revealed by the temporal history of the tea family
- Impacts of Nitrogen and Phosphorus: From Genomes to Natural Ecosystems and Agriculture
- Diversification of Rosaceae since the Late Cretaceous based on plastid phylogenomics
- Cytogeography of Callisia section Cuthbertia (Commelinaceae)
- Adding loci improves phylogeographic resolution in red mangroves despite increased missing data: comparing
Grants and Patents

federal grants, from AA
state, corporate, institutional grants, from UF

2014
- DISSERTATION RESEARCH: An integrative genomic study of multiple domestication events in squash and pumpkin (Cucurbita, Cucurbitaceae), National Science Foundation
- Plant exploration to collect wild cucurbita Germplasm, US DEPT OF AG AG RES SVC

2015
- Collaborative Research: ABI Innovation: Connecting resources to enable large-scale biodiversity analyses, National Science Foundation
- Dimensions US-China: Collaborative Research: How historical constraints, local adaptation, and species interactions shape biodiversity across an ancient floristic disjunction, National Science Foundation
- DISSERTATION RESEARCH: Comparative phylogeography of three co-distributed Neotropical mangrove species, National Science Foundation
- Dissertation Research: The evolutionary significance of autopolyploidy in Tolmiea (Saxifragaceae), National Science Foundation
- Evolution of Specialized Metabolite Biosynthetic Pathways in the Lamiaceae: Sources of Chemical Diversity for Molecules Essential for Human Use and Plant Defense, National Science Foundation

2017
- DISSERTATION RESEARCH: Evolutionary impact of genome duplication on alternative splicing: Genome-wide assessment in a polyploid plant (Tragopogon), National Science Foundation
Awards and Honors

professional awards and honors
listed by title with name of organization

- Asa Gray Award
  *American Society of Plant Taxonomists, The*
  
- Botanical Society of America Merit Award
  *Botanical Society of America*
  
- Highly Cited Researcher
  *Thomson Reuters*
  
- Highly Cited Researcher
  *Thomson Reuters*
  
- Darwin-Wallace Medal
  *Linnean Society of London*
  
- Fellow
  *American Academy of Arts and Sciences*
  
- Members/Foreign Associates
  *National Academy of Science*
Search by Research Topic

e.g. Robotics

1. Refine search using related terms
2. See list of related scholars
3. Link to faculty profile
4. See collaboration networks

Related terms:
- AUTOMATA THEORY
- AUTOMATIC CONTROL
- COMPUTER AIDED MANUFACTURING
- COMPUTER AIDED MAPPING
- COMPUTER VISION
- INVERSE KINEMATICS
- MAN MACHINE SYSTEMS
- MANIPULATORS
- REMOTE OPERATIONS (ROBOTICS)
- ROBOT ARMS
- ROBOT DYNAMICS
- ROBOTS
- TASK PLANNING (ROBOTICS)
- TELEOPERATORS
- TELEROBOTICS
- TRAJECTORY PLANNING
- UNMANNED GROUND VEHICLES

Related scholars:
- CARL CRANE
- DANIEL HOH
- DAVID ARNOLD
- DAVID HAHN
- KAMRAN MOHSENI
- MARKUS SCHNEIDER
- MATTIA PROSPERI
- NORMAN FITZ-COY
- RICCARDO BEVILACQUA
- ROGER TRAN SON TAY
- SCOTT BANKS
- YULI RUDYAK
Search by Research Topic

Climate Change

Paleoclimate

DUTTON, ANDREA LYNN

BRENNER, MARK

CHANELL, JAMES E
Internal View

Only visible to UF faculty.

View more information about publications, grants, and awards.
Explore existing networks of collaborators.
Scan funding opportunities.
Download results.
More details, including link to current publications

1. Works versus Timeline
2. Collaborations
3. Suggested Funding
4. Recent Activity, Related Activity
<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Journal and Details</th>
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<tbody>
<tr>
<td>2017</td>
<td>Insights into the historical assembly of East Asian subtropical evergreen broadleaved forests revealed by the temporal history of the tea</td>
<td>New PhytoLogist [03122969], Vol 215, Issue 3</td>
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<td>2017</td>
<td>Pure polyploidy: Closing the gaps in autopolyplploid research: Pure polyploidy</td>
<td>Journal of Systematics and Evolution [8774968]</td>
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<tr>
<td>2017</td>
<td>Evolution of floral diversity: genomics, genes and gamma</td>
<td>Philosophical Transactions of the Royal Society B: Biological Sciences [36920936], Vol 372, Issue 1713</td>
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<td>2017</td>
<td>Insights into the evolution of hydroxyproline rich glycoproteins from 1000 plant transcriptomes</td>
<td>Plant Physiology [00332068]</td>
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<td>2017</td>
<td>Detecting Alternatively Spliced Transcript Isoforms from Single-Molecule Long-Read Sequences without a Reference Genome</td>
<td>Molecular Ecology Resources [17955089]</td>
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</table>
Insights into the Evolution of Hydroxyproline-Rich Glycoproteins from 1000 Plant Transcriptomes


Published June 2017. DOI: https://doi.org/10.1104/pp.17.00290

Abstract

The carbohydrate-rich cell walls of land plants and algae have been the focus of much interest given the value of cell wall-based products to our current and future economies. Hydroxyproline-rich glycoproteins (HRGPs), a major group of wall glycoproteins, play important roles in plant growth and development, yet little is known about how they have evolved in parallel with the polysaccharide components of walls. We investigate the origin and evolution of the HOGP complex, which includes the HRGP C10 family.
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<td>- Adding loci improves phylogeographic resolution in red mangroves despite increased missing data: comparing microsatellites and RAD markers</td>
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<td>- Fellowship</td>
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<td>- Members/Foreign Associates</td>
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<td>- Phylogeny and Evolution of the Angiosperms</td>
</tr>
<tr>
<td>- DISSERTATION RESEARCH: Evolutionary impact of genome duplication on alternative splicing: Genome-wide assessment in a polyploid species</td>
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</table>
Related Terms and People

**SOLTIS, DOUGLAS**
Biology, Department of Botany, Doctoral Program of Plant Molecular and Cellular Biology, Doctoral Program of Zoology, Doctoral Program of

**Related People**

- **HENNING, RICHARD**
  Materials Science and Engineering, Department of

- **DELEON, ISER**
  Psychology, Department of

- **BEAL, CAROLE**
  Teaching and Learning - Curriculum and Instruction

- **PRINCIPE, JOSE**
  Electrical and Computer Engineering, Department of

- **NINO, JUAN**
  Materials Science and Engineering, Department of

- **COHEN, MATTHEW**
  Forest Resources and Conservation, School of

- **CHEN, SHIGANG**
  Computer and Information Science and Engineering, Department of

- **RANKA, SANJAY**
  Computer and Information Science and Engineering, Department of

- **DERENDORF, HARTMUT**
  Pharmaceutics, Department of

- **HOCHHAUS, GUENTHER**
  Pharmaceutics, Department of

- **HEAL, ABDElseLAM**
  Computer and Information Science and Engineering, Department of

- **HEESACKER, MARTIN**
  Psychology, Department of

- **GIROLAMI, NICOLAS**
  Computer and Information Science and Engineering, Department of
Collaborations

LICHSTEIN, JEREMY has collaborated on 1 grant.

Veterinary Dimensions in US-China: Collaborative Research on species interactions shape biodiversity

Scholars: (3)

Granting agency: National Science Foundation
Awarded amount: $1,190,400,000,000

Biodiversity is multidimensional, con
## Suggested Funding

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<tr>
<th>Title/Sponsor</th>
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<th>Amount</th>
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<td>Ecology and Evolution of Infectious Diseases (EEID) BIO, SBE, FIC, NIFAA, NIGMS, NSF, BSF, NIH, NIAID, BBSRC</td>
<td>11/21/18</td>
<td>$13.5m</td>
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<tr>
<td>Ecology and Evolution of Infectious Diseases (EEID) BIO, SBE, FIC, NIFAA, NIGMS, NSF, BSF, NIH, NIAID, BBSRC</td>
<td>11/21/18</td>
<td>$13.5m</td>
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<td>Limited Competition: Additional Sequencing for the Alzheimer's Disease Sequencing Project (U01 NIA, NIH</td>
<td>7/5/19</td>
<td>$1m</td>
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<td>Computational Radiation Dosimetry in Medicine NIST, NRC Research Associateship Programs RAP</td>
<td>8/1/18</td>
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<tr>
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## Sources of Information

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<td>Journal articles</td>
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<td>Citations</td>
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<td>2004 - present</td>
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<td>Conference Proceedings</td>
<td>collected directly from publishers</td>
<td>2008 - present</td>
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<td>Books</td>
<td>British Library catalog, Baker &amp; Taylor</td>
<td>2004 - present</td>
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<tr>
<td>Honorific Awards</td>
<td>track 5725 awards from 845 societies</td>
<td>1998 - present</td>
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<tr>
<td>Grants</td>
<td>from 12 Federal agencies, 2 foundations, plus internal and state grants</td>
<td>2006 - present</td>
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Next Steps

Demos for deans, research deans, provost office, faculty senate

Open access for select departments, authorized users

Add research summary, research interests for faculty

Open edit feature for faculty profiles, key terms

Monthly updates to scholarly content

UF Faculty Research Expertise
developed by UF Office of the Provost, Institutional Planning and Research
application and content provided by Academic Analytics, LLC
additional content provided by UF